

PCG-K43F/K43Q/K44FP/K45/K45F/K47 PCG-K415B/K415S

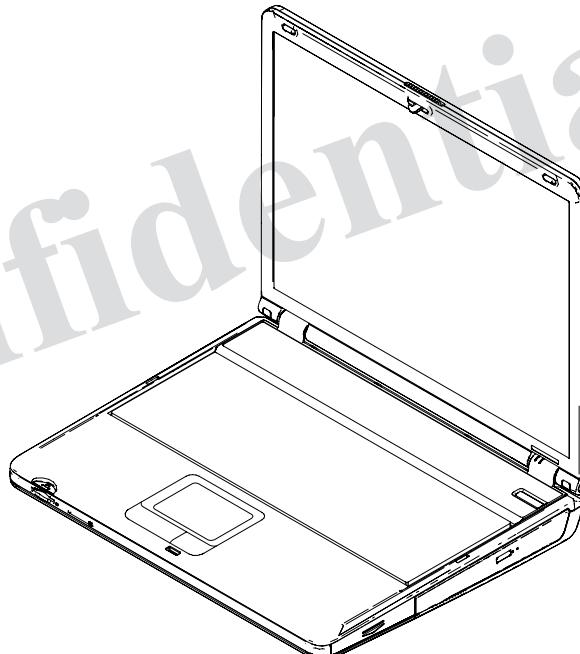
SERVICE MANUAL

Ver. 3 2005D

Revision History

Area	Model	Lineup
American	US Canadian	PCG-K45 PCG-K47
	Latin	PCG-K43F PCG-K44FP PCG-K45F
	Quebec	PCG-K43Q
European	AEP/UK	PCG-K415B PCG-K415S

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- Design and specifications are subject to change without notice.
- 本機の仕様および外観は、改良のため予告なく変更することがあります、ご了承ください。

PERSONAL COMPUTER
SONY[®]

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Caution Markings for Lithium/Ion Battery - The following or similar texts shall be provided on battery pack of equipment or in both the operating and the service instructions.

CAUTION: Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

CAUTION: The battery pack used in this device may present a fire or chemical burn hazard if mis-treated. Do not disassemble, heat above 100°C (212°F) or incinerate. Dispose of used battery promptly. Keep away from children.

CAUTION: Changing the back up battery.

- Overcharging, short circuiting, reverse charging, multilati on or incineration of the cells must be avoided to prevent one or more of the following occurrences; release of toxic materials, release of hydrogen and/or oxygen gas, rise in surface temperature.
- If a cell has leaked or vented, it should be replaced immediately while avoiding to touch it without any protection.

Service and Inspection Precautions

1. Obey precautionary markings and instructions

Labels and stamps on the cabinet, chassis, and components identify are as requiring special precautions. Be sure to observe these precautions, as well as all precautions listed in the operating manual and other associated documents.

2. Use designated parts only

The set's components possess important safety characteristics, such as noncombustibility and the ability to tolerate large voltages. Be sure that replacement parts possess the same safety characteristics as the originals. Also remember that the Δ mark, which appears in circuit diagrams and parts lists, denotes components that have particularly important safety functions; be extra sure to use only the designated components.

3. Always follow the original design when mounting parts and routing wires

The original layout includes various safety features, such as inclusion of insulating materials (tubes and tape) and the mounting of parts above the printer board. In addition, internal wiring has been routed and clamped so as to keep it away from hot or high-voltage parts. When mounting parts or routing wires, therefore, be sure to duplicate the original layout.

4. Inspect after completing service

After servicing, inspect to make sure that all screws, components, and wiring have been returned to their original condition. Also check the area around the repair location to ensure that repair work has caused no damage, and confirm safety.

5. When replacing chip components...

Never reuse components. Also remember that the negative side of tantalum capacitors is easily damaged by heat.

6. When handling flexible print boards...

- The temperature of the soldering-iron tip should be about 270°C.
- Do not apply the tip more than three times to the same pattern.
- Handle patterns with care; never apply force.

Caution: Remember that hard disk drives are easily damaged by vibration. Always handle with care.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE Δ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANSCE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

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PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
CHAPTER 1. SPECIFICATIONS					
1-1.	Specifications	1-1			
	(to 1-1)				
CHAPTER 2. BLOCK DIAGRAM 2-1					
	(to 2-1)				
CHAPTER 3. FRAME HARNESS DIAGRAM 3-1					
	(to 3-1)				
CHAPTER 4. EXPLODED VIEWS AND PARTS LIST					
Palmrest					
P-1		4-2			
Main Board					
M-1		4-4			
Bottom					
B-1.....		4-6			
Hood Keyboard					
H-1.....		4-8			
LCD					
L-1. 15.4-inch WXGA (High Brightness) –Made by QDI–.....		4-10			
Accessories					
A-1.....		4-12			
DIP Switch		4-13			
	(to 4-13)				
CHAPTER 5. OTHERS					
5-1.	The Barcode Label	5-1			
5-2.	Replacing the CPU	5-2			
	(to 5-2)				

History of the changes is shown as the "Revision History" at the end of this data.

変更履歴は、"Revision History"として、本データ末に記載しています。

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PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

CHAPTER 1.

SPECIFICATIONS

1-1. Specifications

	AM					
	PCG-K47	PCG-K45	PCG-K45F	PCG-K43F	PCG-K44FP	PCG-K43Q
CPU	M-P4 3.20GHz	M-P4 3.20GHz	M-P4 3.20GHz	CeID 3.06GHz	M-P4 3.06GHz	M-P4 3.20GHz
Graphic	RADEON IGP 345M					
LCD	15.4/WXGA (High Brightness)					
HDD	100GB	80GB	60GB	40GB	40GB	80GB
MEMORY(Slot1)	512MB/DDR/266	256MB/DDR/266	256MB/DDR/266	256MB/DDR/266	256MB/DDR/266	256MB/DDR/266
MEMORY(Slot2)	512MB/DDR/266	256MB/DDR/266	256MB/DDR/266	256MB/DDR/266	256MB/DDR/266	256MB/DDR/266
QUANTITY[STANDARD/MAX]	1GB/1GB	512MB/1GB	512MB/1GB	512MB/1GB	512MB/1GB	512MB/1GB
AVAILABLE SLOT(STANDARD)	1	1	1	1	1	1
OPT-DRIVE	DVD+-RW/+DL	Combo	DVD+-RW/+DL	Combo	Combo	Combo
AC adaptor	AC19V9	AC19V9	AC19V9	AC19V9	AC19V9	AC19V9
Battery	BP2NY	BP2NY	BP2NY	BP2NY	BP2NY	BP2NY
internal W-LAN	○	○	○	○	○	○
OS	XP Home	XP Home	XP Home	XP Home	XP Pro	XP Home

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	EU	
	PCG-K415S	PCG-K415B
CPU	M-P4 3.06GHz	CeID 3.06GHz
Graphic	Mobility(TM) Radeon(TM) 9200	RADEON IGP 345M
LCD	15.4/WXGA (High Brightness)	15.4/WXGA (High Brightness)
HDD	60GB	40GB
MEMORY(Slot1)	256MB/DDR/266	256MB/DDR/266
MEMORY(Slot2)	256MB/DDR/266	256MB/DDR/266
QUANTITY[STANDARD/MAX]	512MB/1GB	512MB/1GB
AVAILABLE SLOT(STANDARD)	1	1
OPT-DRIVE	DVD+-RW/+DL	DVD+-RW/+DL
AC adaptor	AC19V9	AC19V9
Battery	BP2NY	BP2NY
internal W-LAN	○	○
OS	XP Home	XP Home

• The trademarks of registered trademarks of above table, refer to page 2.

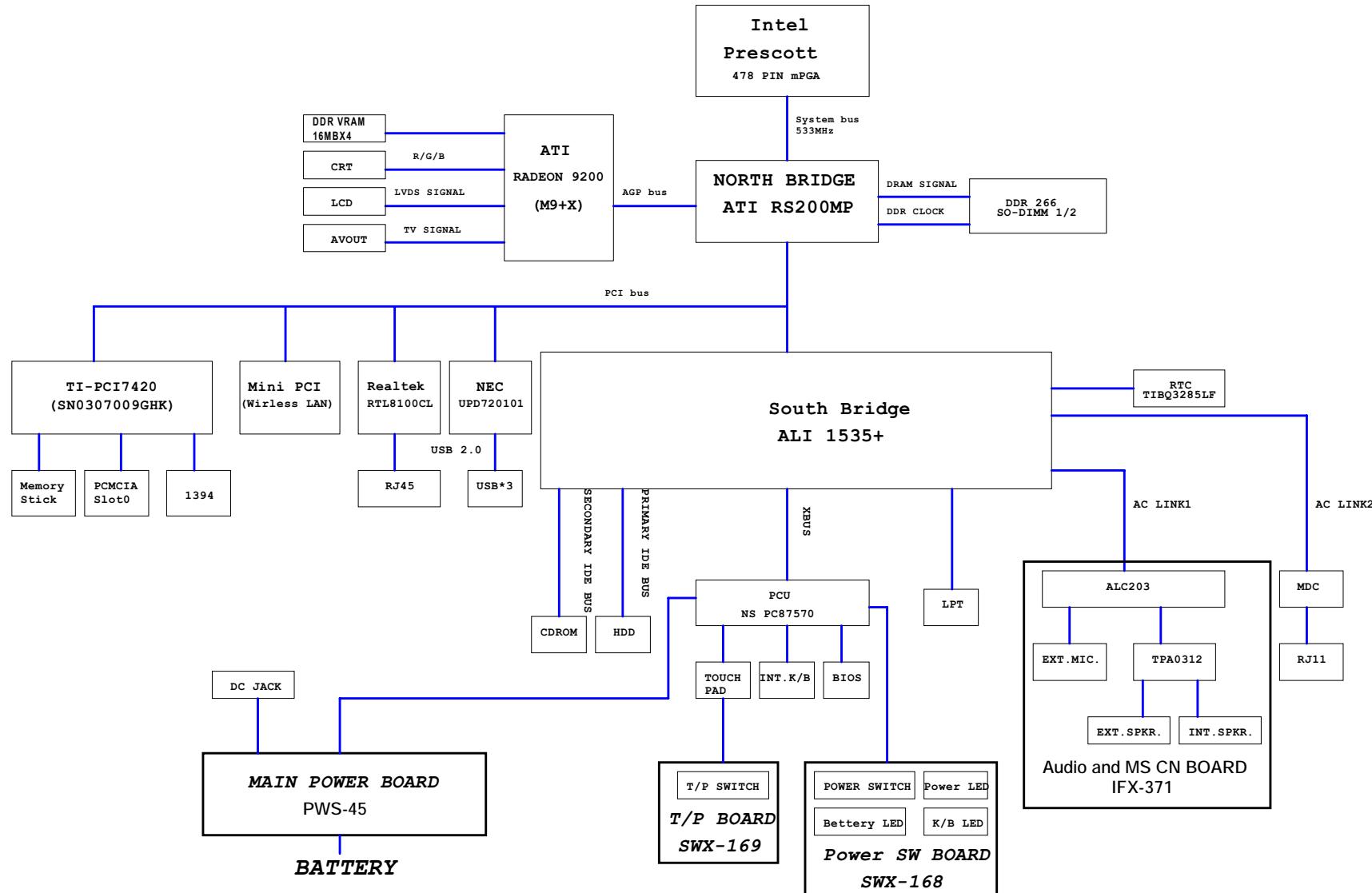
• 本表中の商標・登録商標については、2ページをご参照ください。

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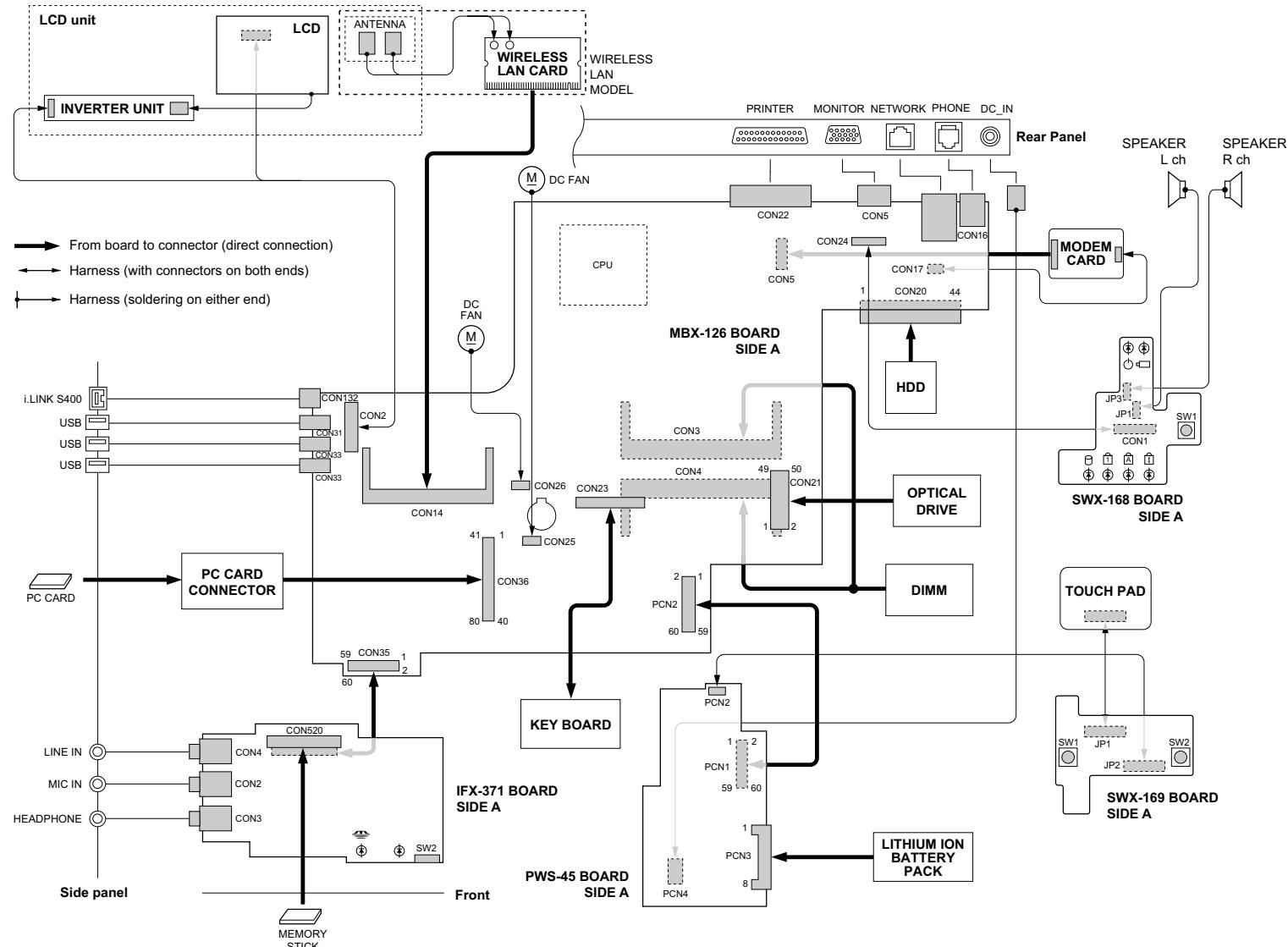
CHAPTER 2.

BLOCK DIAGRAM



CHAPTER 3.

FRAME HARNESS DIAGRAM



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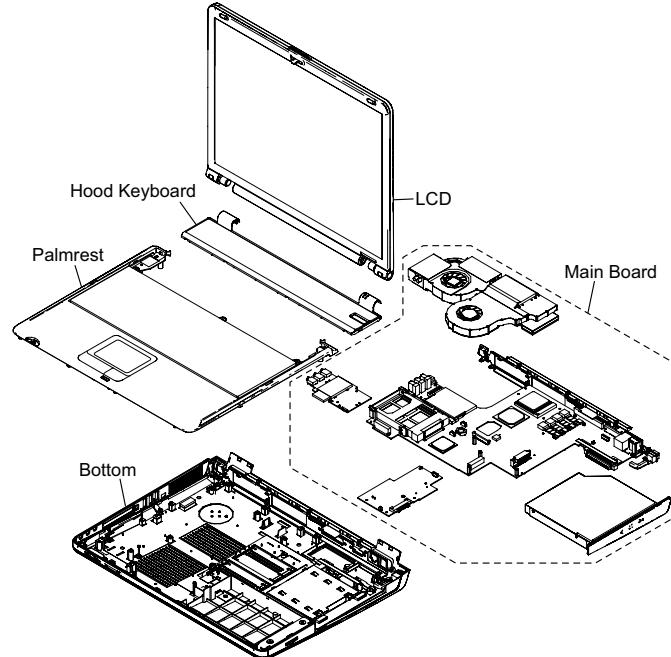
CHAPTER 4.

EXPLODED VIEWS AND PARTS LIST

- The parts list is compiled by blocks of a palmrest and bottom etc.
The sections of the parts list are different depending on the model.
Please refer to list of contents shown in the below.

- 分解図と部品表は、パームレスト、ボトムなどのブロックごとに分かれています。
機種によって部品表のセクションが異なりますので、詳細は右下の一覧表を参照してください。

Section	Page
Palmrest	
P-1	4-2
Main Board	
M-1	4-4
Bottom	
B-1	4-6
Hood Keyboard	
H-1	4-8
LCD	
L-1. 15.4-inch WXGA (High Brightness) -Made by QDI-	4-10
Accessory	
A-1	4-12
DIP Switch	4-13



NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- When two or more parts are shown, use the part described first as the main part.
- The parts marked " \$" are the High Value Modules (HVM).
- The parts marked " # " are the parts on which barcode label is attached. For the barcode label, refer to CHAPTER 5.
- The parts marked "&" are the "Customer Replaceable Parts (CRP)" that can be replaced by Field Customer Support. Especially the parts with the <&> mark require the special attention to use them. Here fore, check first whether the desired part is one of the targetted parts of the Customer Replaceable Parts (CRP), or the non-targetted parts by referring to the exploded view.

【使用上の注意】

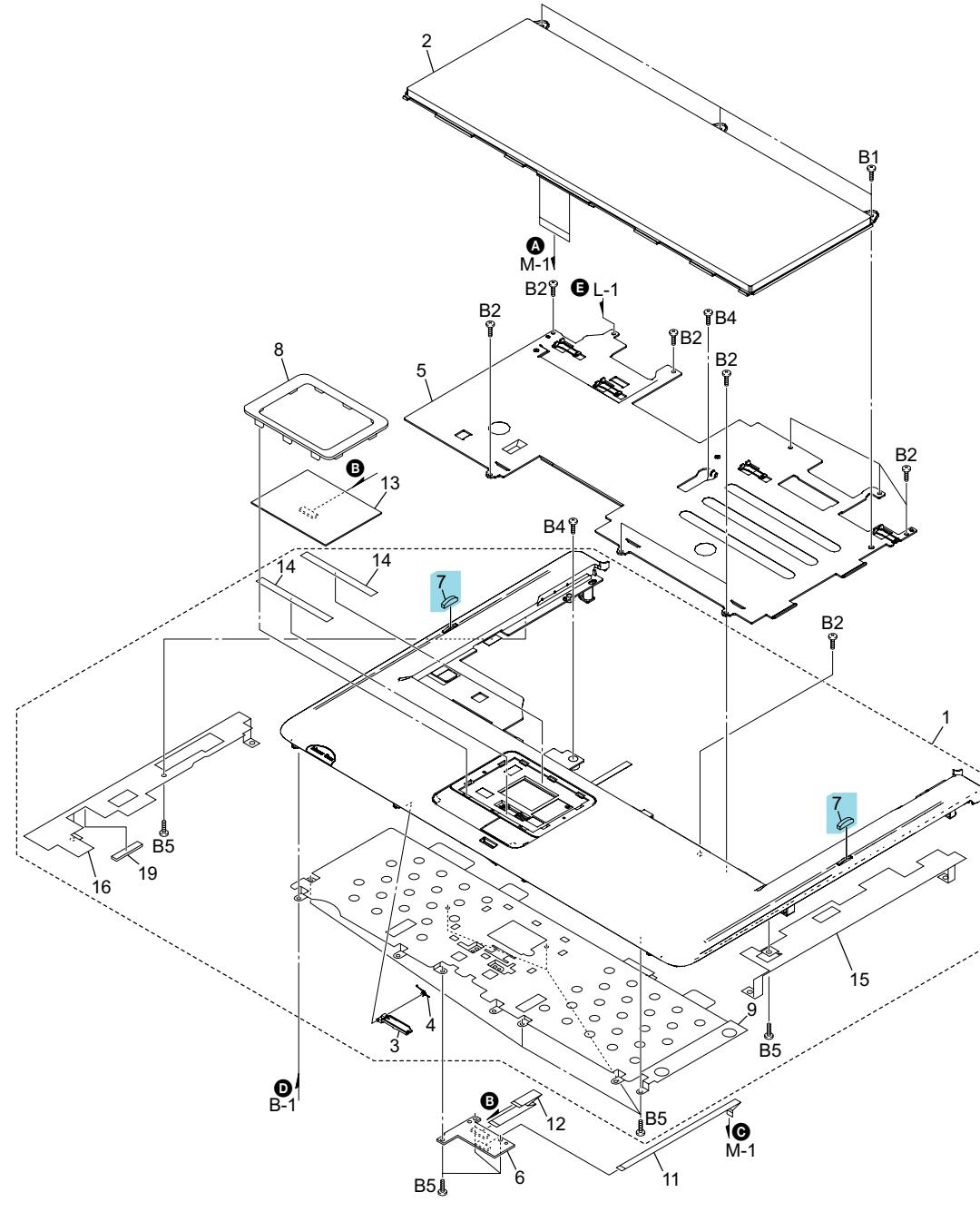
- *印の部品は常備在庫していません。
- 図面番号のない部品は供給しません。
- 併記部品の場合、上部記載部品をメイン部品として使用してください。
- 部品名称の前に\$印のついた部品は、High Value Module (HVM) です。
- 商品名称の前に#印のついた部品は、バーコードラベル貼付部品です。バーコードラベルについてはCHAPTER 5を参照してください。
- 部品名称の前に&印のついた部品は、お客様窓口などでも交換可能なCustomer Replaceable Part (CRP) です。
- 特に<&>のついた部品は、使い分けが必要な部品ですので、分解図でCustomer Replaceable Parts対象部品か、対象外部品かを必ず御確認ください。

	Palmrest	Main Board	Bottom	Hood Keyboard	LCD	Accessory
AM	K47	P-1	M-1	B-1	H-1	L-1
	K45	P-1	M-1	B-1	H-1	L-1
	K45F	P-1	M-1	B-1	H-1	L-1
	K43F	P-1	M-1	B-1	H-1	L-1
	K44FP	P-1	M-1	B-1	H-1	L-1
	K43Q	P-1	M-1	B-1	H-1	L-1
EU	K415S	P-1	M-1	B-1	H-1	L-1
	K415B	P-1	M-1	B-1	H-1	L-1

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

△印の部品、または△印付きの点線で囲まれた部品は、安全性を維持するために重要な部品です。従って交換時は、必ず指定の部品を使用して下さい。

P-1. Palmrest

4-2

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PCG-K415B/K415S (EU)

P-1. Palmrest

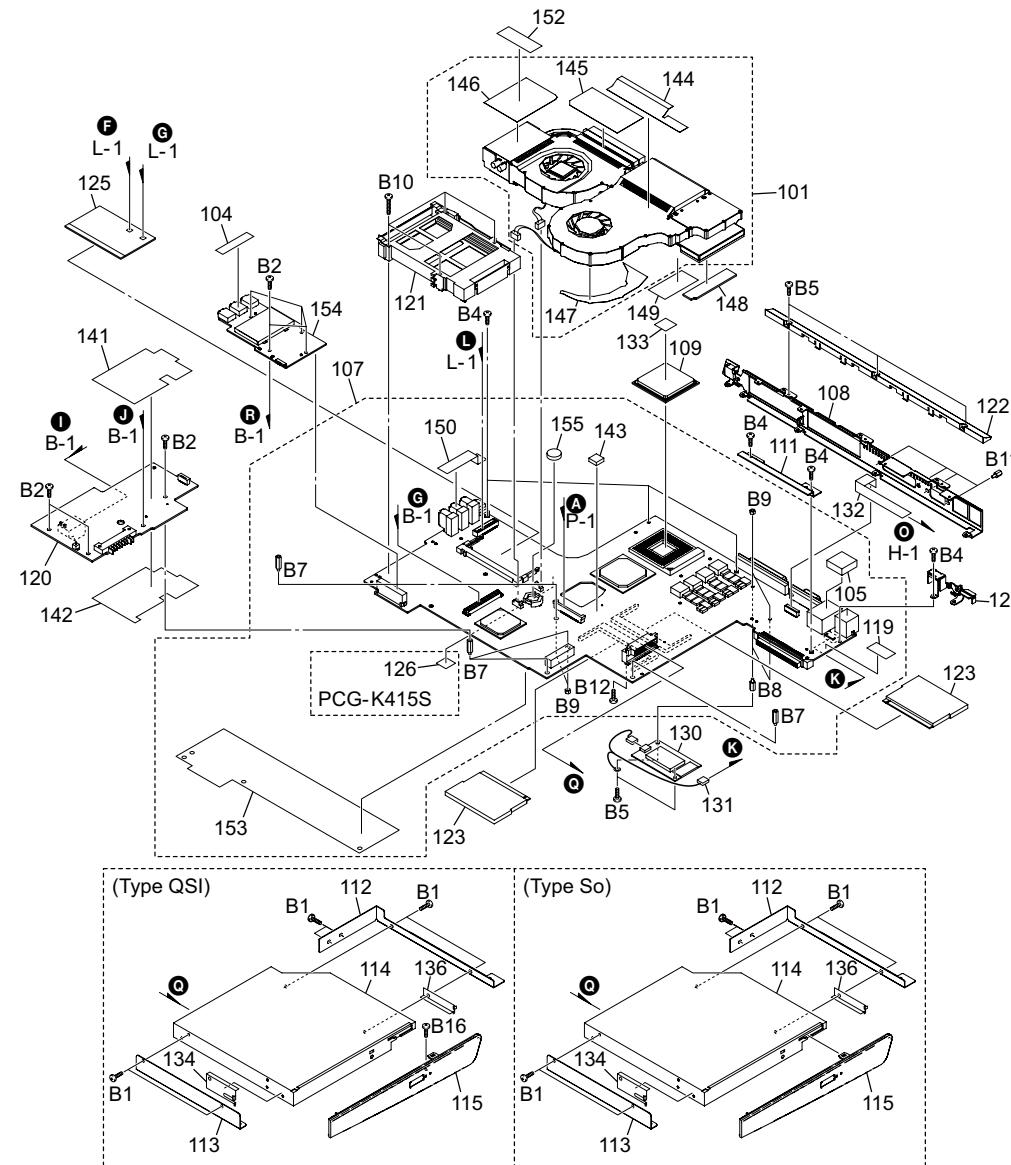
Ref. No.	Part No.	Description
1	X-2023-730-1	HOUSING PALMREST ASSY JE51
3	4-681-301-01	LATCH DETECTOR
4	4-676-233-01	SPRING LATCH DETECTOR
* 5	2-178-998-01	BRACKET KEYBOARD
6	A-8068-709-A \$	COMPLETE PWB SWX-169
7	4-681-295-02	& CUSHION PALMREST
8	4-681-296-01	ESCUTCHEON TOUCHPAD
9	2-179-005-01	BRACKET TOUCHPAD
11	1-829-355-11	CABLE, FLEXIBLE FLAT TP-PWS
12	1-829-140-11	FFC (TO T/P)
13	1-796-319-51	PAD, TOUCH
14	2-179-580-01	TAPE TP
15	2-179-001-01	BRKT PALMREST R
16	2-179-002-01	BRKT PALMREST L
19	2-349-107-01	GASKET USB JE5
B1	4-216-272-01	SCREW (M2), +
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2

Ref. No.	Part No.	Description	AM	EU
2	1-478-597-12	KEYBOARD UNIT(US)	● ●	
	1-478-598-12	(UK,Dutch) KEYBOARD UNIT(GB)		● ●
	1-478-598-23	(German) KEYBOARD UNIT(DE)		● ●
	1-478-598-42	(Dutch,French) KEYBOARD UNIT(FR)		● ●
△[MA]	1-478-598-62	(Spanish) KEYBOARD UNIT(ES)	● ●	
△[MA]	1-478-598-72	KEYBOARD UNIT(LA)	● ● ●	
△[MA]	1-478-598-82	KEYBOARD UNIT(CA)	●	

△[MA] △[MA] △[MA] △[MA]

- This parts list contains two different types of parts.
The first type is the parts that are common to all models.
The other type is the parts that are different depending on each model.
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。

M-1. Main Board



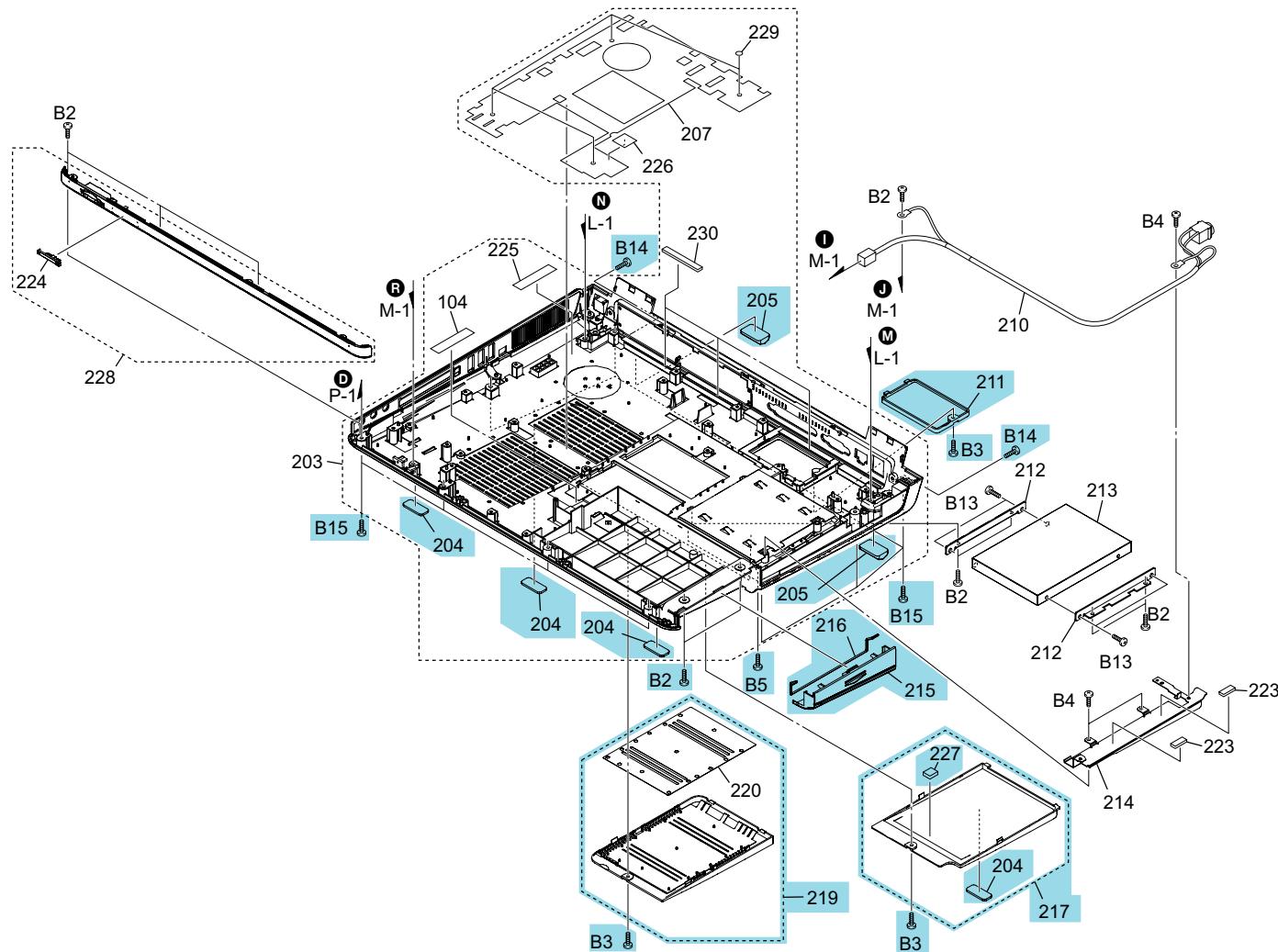
M-1. Main Board

Ref. No.	Part No.	Description
101	A-1086-462-A	JE5 COOLING UNIT (S)
104	2-349-106-01	CUPPER TAPE AUDIO JE5
105	2-022-439-01	GASKET LAN
108	X-2023-732-1	I/O BRACKET ASSY
* 111	4-674-030-01	GUIDE DRIVE
* 112	2-159-394-01	BRACKET DRIVE R JE2
* 113	2-179-006-01	BRACKET DRIVE L JE2
119	-	KAPTON TAPE
120	A-1071-984-A	COMPLETE PWB PWS-45
121	1-818-420-12	PC CARD CONNECTOR
122	4-681-305-01	COVER HOOD
* 129	2-179-009-01	BRACKET DC JACK
130	1-761-606-14	CARD, MODEM
131	1-963-379-11	HARNESS 2PIN (JE5)
132	1-830-249-11	CABLE,FLEXIBLE FLAT S-M JE5
133	2-549-332-01	PAD CPU JE5
134	4-670-244-01	SPRING DRIVE R
141	2-189-268-01	INSULATOR PWS TOP
142	2-189-269-01	INSULATOR PWS BOTTOM
143	2-189-270-01	CUSHION FAN 1
144	2-549-328-01	INSULATOR FIN1 JE5
145	2-549-329-01	INSULATOR FIN2 JE5
146	2-549-330-01	INSULATOR FIN3 JE5
147	2-549-331-01	INSULATOR FAN1 JE5
148	2-549-333-01	PAD POWER JE5
149	2-549-334-01	PAD POWER MOS JE5
150	2-349-105-01	CUPPER TAPE USB JE5
152	-	KAPTON TAPE
153	2-581-064-01	BOTTOM SHIELDING JE5
154	A-1071-988-A	COMPLETE PWB IFX-371 (WL)
155	1-756-148-11	SECONDARY, BATTERY LITHIUM
B1	4-216-272-01	SCREW (M2), +
B2	4-641-726-12	SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2
B7	2-549-335-01	STAND M2* 3.5-10.4
B8	4-651-989-41	SPACER (MBX)
B9	7-622-205-05	NUT M2 TYPE2
B10	4-644-637-91	GRIP, M2 EG
B11	4-635-966-01	SCREW (HEX)
B12	7-621-772-50	SCREW +B 2X10
B16	4-679-805-01	SCREW (B1.7), TAPPING
B17	4-679-805-11	SCREW (B1.7), TAPPING

Ref. No.	Part No.	Description	AM					
			K47	K45	K45F	K43F	K44FP	K43Q
107	A-1071-982-A	COMPLETE PWB MBX-126 INT JE51	●	●	●	●	●	●
	A-1071-983-A	COMPLETE PWB MBX-126 EXT JE51						●
109	6-707-623-01	IC RK80546HE0831MSL7NA(3.06GHz)					●	●
	6-707-622-01	IC RK80546HE0881MSL7NB(3.20GHz)	●	●	●		●	●
	6-707-737-01	IC RK80546RE083296SL7NX(Cer-3.06GHz)					●	●
114	8-457-624-90	DRIVE, DVD DW-D56A-V2	●	●			●	●
	1-796-941-12	COMBO DRIVE (SBW-242C)(QSI)	●	●	●	●	●	●
115	X-2024-583-1	ASSY SO D56A BEZEL	●	●			●	●
	X-2024-615-1	ASSY QSI 242C BEZEL	●	●	●	●	●	●
123	6-705-096-01	IC HYS64D64020HBDL-6-C(512MB)	●					
	6-707-029-01	IC HYS64D32020HDL-6-C(256MB)	●	●	●	●	●	●
125	1-789-014-31	CARD, WIRELESS LAN	●	●				●
	1-789-014-11	CARD, WIRELESS LAN	●	●	●	●	●	●
126	2-022-443-01	VGA HEATSINK	●					●
	4-677-259-01	SPRING DRIVE L	●	●	●	●	●	

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- When change the CPU (ref. 109), refer to "Replacing the CPU" in CHAPTER 5.
CPU (Ref. 109) を交換する際には、CHAPTER 5の「Replacing the CPU」をご参照下さい。

B-1. Bottom

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B-1. Bottom

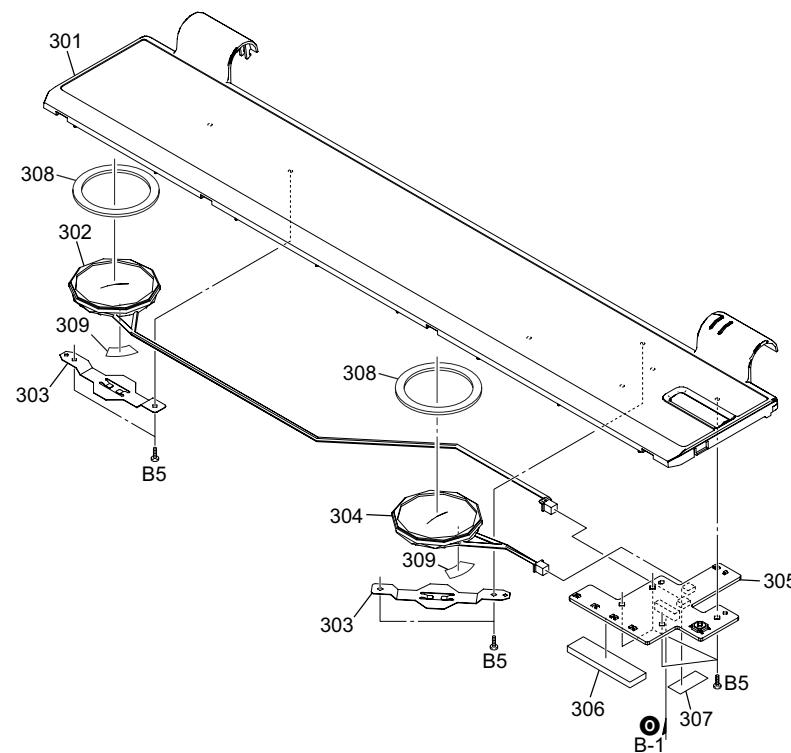
Ref. No.	Part No.	Description
104	2-349-106-01	CUPPER TAPE AUDIO JE5
203	X-2023-731-1	HOUSING BOTTOM ASSY JE51
204	2-050-614-01	& FOOT FRONT
205	4-674-041-02	& FOOT REAR
207	2-179-007-01	INSULATOR HEATSINK BTM
210	1-963-704-11	HARNESS, DC JACK
211	4-681-314-01	& COVER MODEM
* 212	4-674-033-01	BRACKET HDD
* 214	2-179-008-01	BRKT HOLDER PW CABLE
215	4-681-318-01	& DOOR BATTERY
216	4-681-337-01	& BATTERY DOOR LINK
217	X-2048-464-1	& COVER HDD ASSY JE5
219	X-2022-037-1	& COVER MEMORY ASSY
220	4-682-977-01	INSULATOR MEMORY
223	2-176-882-01	GASKET ODD JE3
224	4-681-362-01	SWITCH WIRELESS LAN
225	2-189-273-01	CUSHION FAN 2
226	2-549-326-01	ACETATE TAPE BLACK JE1
227	2-022-449-01	& SPONGE COVER HDD
228	X-2023-743-1	ESCUTCHEON FRONT ASSY (WL)
229	2-549-325-01	INSULATOR HEATSINK BTM2 JE5
230	2-022-444-01	GASKET HOUSING BTM1
B2	4-641-726-12	<&> SCREW (M2), SPECIAL HEAD
B3	4-672-834-31	& SCREW, +B EG GRIP
B4	4-641-726-41	& SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	& SPECIAL FLAT HEAD (EG GRIP), M2
B13	4-673-018-02	SCREW SPECIAL HEAD
B14	4-673-655-01	& SCREW +B
B15	4-644-637-01	& GRIP, M2 EG

Ref. No.	Part No.	\$ #	Description						
			K47	K45	K45F	K45F	K44FP	K43Q	K415S
213	A-1086-982-A	\$ #	HDD(40GB,HTS424040M9AT00)(S)		●	●			●
	A-8117-201-A	\$ #	HDD(MHT2060AT-60GB)(S)		●				●
	A-1083-189-A	\$ #	HDD(MHT2080AT-80GB)(S)		●				●
	A-1083-188-A	\$ #	HDD(MHU2100AT-100GB)(S)	●					



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H-1. Hood Keyboard



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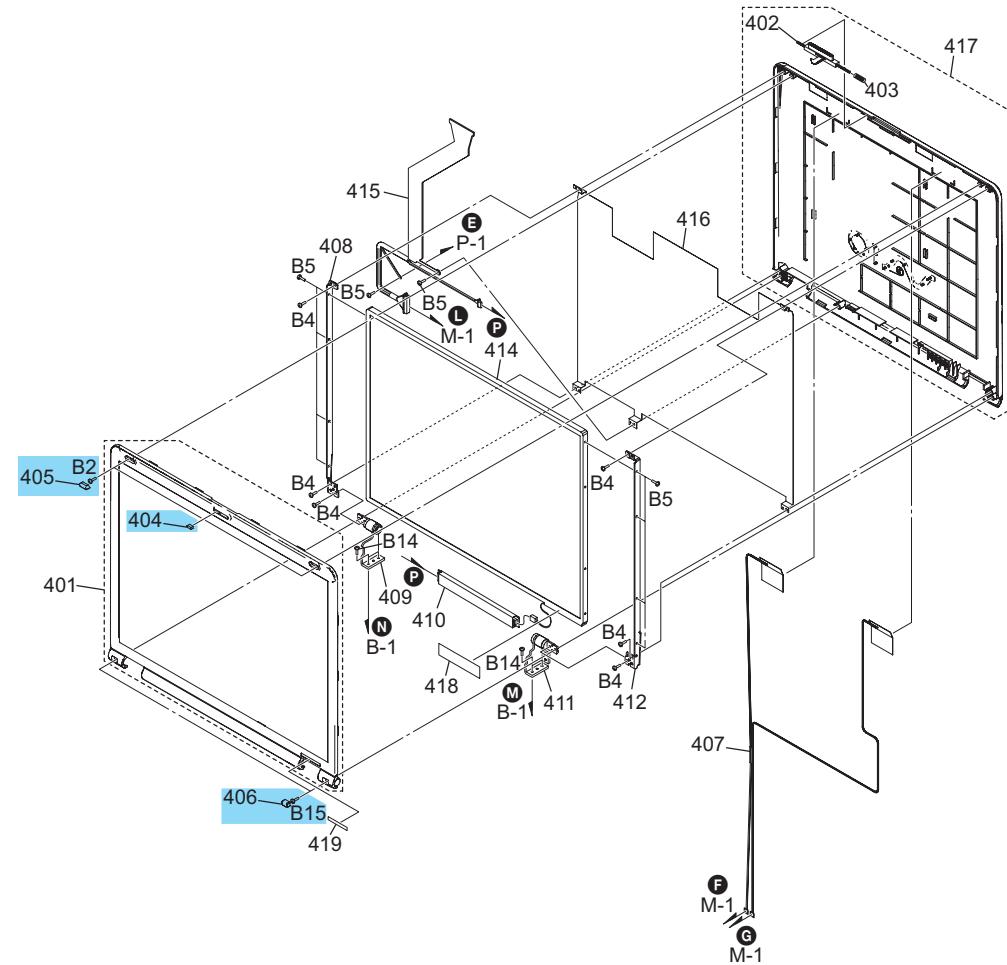
PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

H-1. Hood Keyboard

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
301	X-2022-035-1	HOOD KB ASSY
302	1-825-825-21	SPEAKER (3.2CM)
* 303	4-681-308-01	BRACKET SPK
304	1-825-825-11	SPEAKER (3.2CM)
305	A-8068-706-A \$	COMPLETE PWB SWX-168
306	2-022-447-01	GASKET PW BOARD
307	-	KAPTON TAPE
308	2-179-699-01	CUSHION SPEAKER
309	2-189-971-01	GUARD SPEAKER
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2

ConfidentialPCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

L-1. LCD 15.4-inch WXGA (High Brightness) – Made by QDI –



Confidential

PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

L-1. LCD 15.4-inch WXGA (High Brightness)

- Made by QDI -

Ref. No.	Part No.	Description
401	X-2022-041-1	BEZEL DISPLAY ASSY
402	2-050-591-01	BUTTON LATCH LCD
403	2-176-929-01	SPRING LATCH LCD JE3
404	4-681-353-02	& CUSHION LATCH
405	4-681-354-02	& CUSHION LCD
406	4-681-355-02	& CUSHION HINGE
407	1-754-326-11	DUAL BAND ANTENNA (HBLACK)
* 408	2-067-071-01	BRACKET LCD L
409	2-179-000-01	HINGE L
410	1-478-805-12	INVERTER UNIT
	1-478-976-11	INVERTER UNIT
411	2-178-999-01	HINGE R
* 412	2-067-070-01	BRACKET LCD R
414	A-1070-777-A	\$ # ASSY LCD 15WXGA(QDI)(S)
415	1-963-380-11	HARNESS, LCD (JE5)
416	2-050-612-01	LCD SHIELDING
417	X-2022-040-1	HOUSING DISPLAY ASSY
418	-	KAPTON TAPE
B2	4-641-726-12	& SCREW (M2), SPECIAL HEAD
B4	4-641-726-41	SCREW (M2), SPECIAL HEAD
B5	4-665-205-01	SPECIAL FLAT HEAD (EG GRIP), M2
B14	4-673-655-01	SCREW +B
B15	4-644-637-01	& GRIP, M2 EG

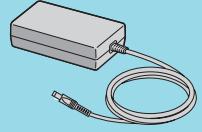
Ref. No.	Part No.	Description	AM	EU
419	2-584-826-01	ID LABEL (U)	K47	
	2-584-826-11	ID LABEL (U)	K45	
△[MA]	2-584-826-41	ID LABEL (U)	K45F	
△[MA]	2-584-826-51	ID LABEL (U)	K43F	
△[MA]	2-584-826-61	ID LABEL (U)	K44FP	
△[MA]	2-584-826-71	ID LABEL (U)	K43Q	
	2-584-826-21	ID LABEL (E)	K415S	
	2-584-826-31	ID LABEL (E)	K415B	

△
[MA]
△
[MA]
△
[MA]
△
[MA]

- This parts list contains two different types of parts.
The first type is the parts that are common to all models.
The other type is the parts that are different depending on each model.
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。

A-1. Accessories

**1001
AC Adaptor**



**1002
Battery**



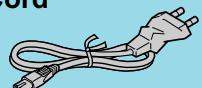
**1004
Power Cord**



**1005
AC Power Cord**



**1008
Power-supply
Cord**



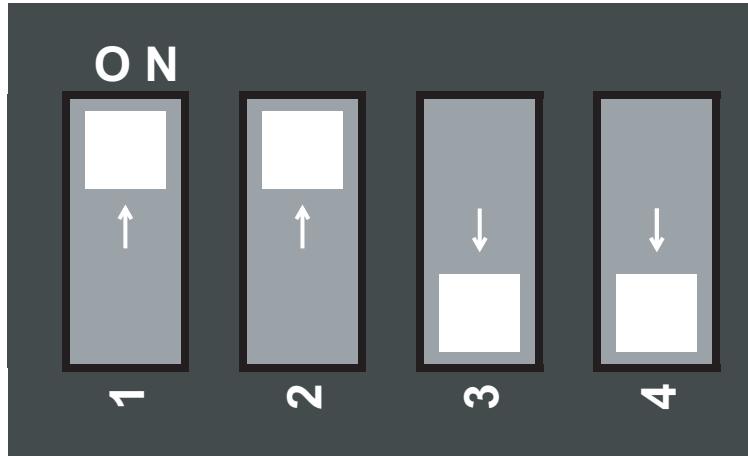
Ref. No.	Part No.		AM		EU			
			K47	K45	K45F	K43F	K44FP	
△ 1001	1-478-390-72	\$ & ADAPTOR, AC	●	●	●	●	●	●
△ 1002	A-8120-052-A	\$ & BP-2NY(U)ASSY(S)	●	●				
	A-8120-053-A	\$ & BP-2NY ASSY (S)			●	●	●	●
△ 1004	1-829-237-21	& CORD, POWER	●	●	●	●	●	●
△ 1005	1-823-935-51	& CORD, AC POWER					●	●
△ 1008	1-827-481-21	& POWER-SUPPLY CORD					●	●
-	1-816-429-12	& (UK)...PHONE PLUG (GB)					●	●
-	2-585-159-01	& QUICK START (K) (EN) (CDS)	●	●				
△[MA]	- 2-585-160-01	& QUICK START (K) (FR) (CDS)					●	
△[MA]	- 2-585-161-01	& QUICK START (K) (SP) (CDS)		●	●	●		
-	2-584-827-11	& (UK,Dutch)...HW SPECS					●	●
-	2-584-827-21	& (German)...HW SPECS					●	●
-	2-584-827-31	& (Dutch,French)...HW SPECS					●	
-	2-584-827-41	& (Spanish)...HW SPECS					●	
-	2-584-827-51	& (UK,Dutch,French)...HW SPECS					●	

△[MA] △[MA] △[MA] △[MA]

- This parts list contains two different types of parts.
The first type is the parts that are common to all models.
The other type is the parts that are different depending on each model.
- この部品表は、機種共通の部品と、機種によって使い分けが必要な部品に分かれています。

DIP Switch

- The DIP switch setting is following table.
- DIPスイッチの設定は下の表をご参照ください。



△ [COR]

CHAPTER 5.

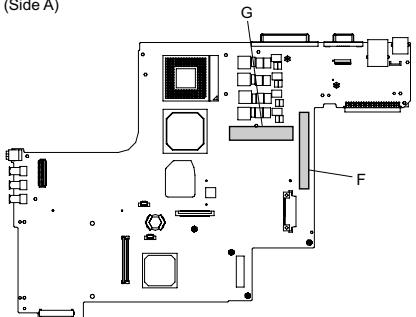
OTHER

5-1. The Barcode Label

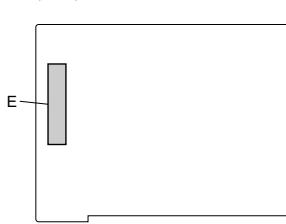
The hatched portion of the barcode is used as the repair data.

バーコードラベルの網掛け部は、修理データとして使用いたします。

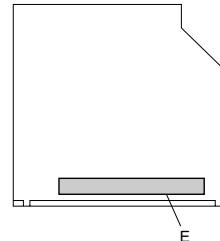
[MBX-126 Board]
(Side A)



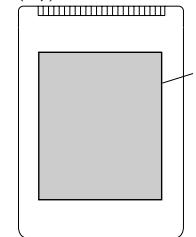
[LCD 15.4-inch WXGA (High Brightness) (QDI)]
(Rear)



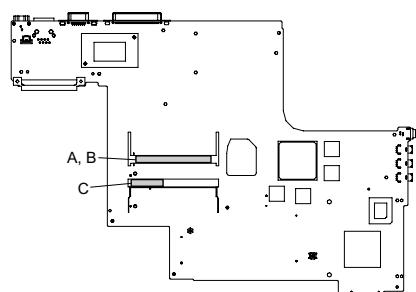
[DVD+RW Drive (Made by Pa)]
(Top)



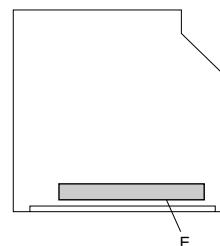
[HDD]
(Top)



[MBX-126 Board]
(Side B)



[Combo Drive (Made by QSI)]
(Top)



A	: Part No.
B	: Serial No.
C	: Revision No.
D	: Product Code
E	: Maker Barcode
F	: Global User ID (iLink)
G	: Mac Address
	: Barcode

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PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

5-2. Replacing the CPU

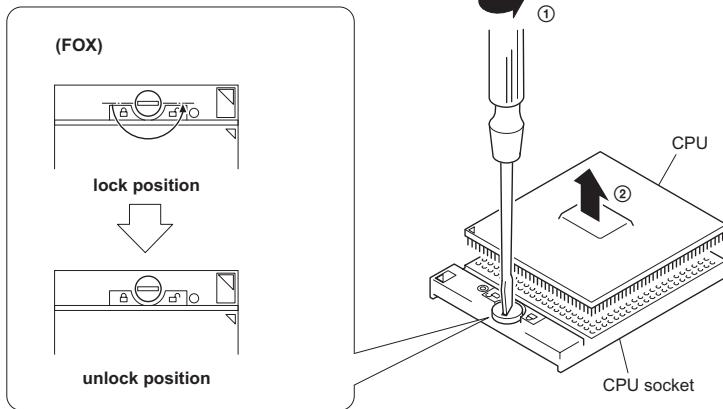
Note: We have two kinds of CPU for this set, and either of them is used.

Two kinds of CPU have differences in the lock position and the unlock position.

1. Socket configuration 1

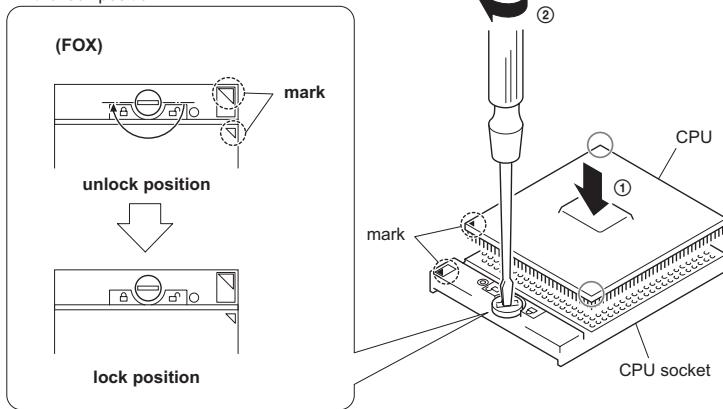
1. How to remove the CPU

- ① Rotate the lock with a flat-blade screwdriver toward the unlock position shown in the figure.
- ② Remove up the CPU.



2. How to install the CPU

- ① Position the mark on the CPU to the mark on the CPU socket and put in all pins to the holes on the CPU socket.
- ② Pressing two corners marked with ○ in the figure, rotate the lock with a flat-blade screwdriver toward the lock position.

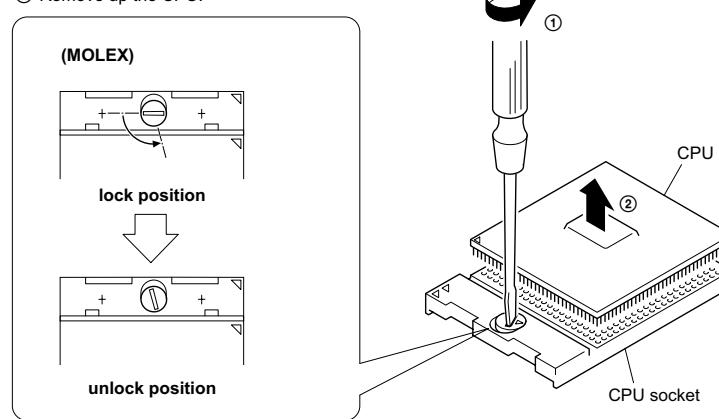


Note: Lock the CPU properly, or operation becomes unstable.

2. Socket configuration 2

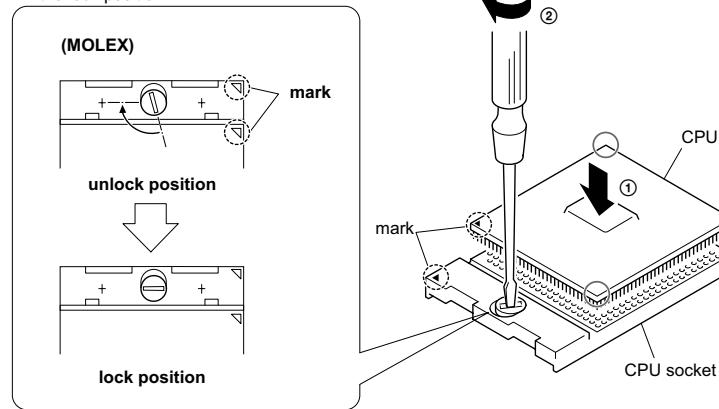
1. How to remove the CPU

- ① Rotate the lock with a flat-blade screwdriver toward the unlock position shown in the figure.
- ② Remove up the CPU.



2. How to install the CPU

- ① Position the mark on the CPU to the mark on the CPU socket and put in all pins to the holes on the CPU socket.
- ② Pressing two corners marked with ○ in the figure, rotate the lock with a flat-blade screwdriver toward the lock position.



Note: Lock the CPU properly, or operation becomes unstable.

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PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)



PCG-K43F/K43Q/K44FP/K45/K45F/K47 (AM)
PCG-K415B/K415S (EU)

List of K Series (PCG & VGN) (As of April, 2005)

Service Manual	Model Name			
	J	AM	EU	AO
9-876-365-XX		PCG-K12FP	PCG-K115B	PCG-K64
		PCG-K12P	PCG-K115M	PCG-K64S
		PCG-K13	PCG-K115S	PCG-K66P
		PCG-K13F	PCG-K115Z	PCG-K66SP
		PCG-K13Q	PCG-K195BP	
		PCG-K14	PCG-K195HP	
		PCG-K15		
		PCG-K15F		
		PCG-K17		
9-876-371-XX	VGN-K30	PCG-K20P	PCG-K215B	PCG-K74
	VGN-K30B	PCG-K24FP	PCG-K295HP	PCG-K74S
	VGN-K50B			PCG-K76P
	VGN-K70B			PCG-K76SP
9-876-373-XX		PCG-K23	PCG-K215M	
		PCG-K23F	PCG-K215S	
		PCG-K23Q	PCG-K215Z	
		PCG-K25		
		PCG-K25F		
		PCG-K27		
9-876-388-XX		VGN-K31	PCG-K33	PCG-K86P
		VGN-K31B	PCG-K33F	PCG-K86SP
		VGN-K71B	PCG-K33P	
			PCG-K33Q	
			PCG-K34FP	
			PCG-K35	
			PCG-K35F	
			PCG-K37	
9-876-406-XX		PCG-K43F	PCG-K415B	
		PCG-K43Q	PCG-K415S	
		PCG-K44FP		
		PCG-K45		
		PCG-K45F		
		PCG-K47		

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Revision History

Suffix	Ver.	Date	Contents	QM No.
-01	Ver. 1	2005.01.07	First Edition	
-02	Ver. 2	2005.01.28	 Front Page (Model Lineup), Page 1-1, Page 4-1, Page 4-3, Page 4-5, Page 4-7, Page 4-11 to 4-12, Back Cover	N2004_145AK
-03	Ver. 3	2005.05.10	 Page 4-13	N2005_005CK